DEPARTMENT OF DEFENSE
DEFENSE INFORMATION SYSTEMS AGENCY
UNITED STATES OF AMERICA

Integration Decision Paper
(IDP):

Migration System Selection
for XYZ Functional Activity
(TEMPLATE)

CENTER FOR INTEGRATION AND INTEROPERABILITY

22 February 1994

EXECUTIVE SUMMARY

This Integration Decision Paper (IDP) summarizes the migration system decision to be implemented by the _____ Functional Activity. This IDP documents the migration system selected and the projected costs to implement the selected system throughout the functional activity. This section also identifies the return on investment and payback period associated with implementing this decision. This document fulfills the requirement stated in DoD 8020.1-M to select a migration system for the affected functional activity.

It should be noted the information gathered for the Integration Decision Paper (IDP) can be reused as the information technology (IT) component of the Functional Economic Analysis (FEA) and functional process improvement (FPI) efforts required by DoD 8020.1-M. This information can also be used to support future cross-functional integration efforts as part of ongoing DoD Enterprise Integration efforts.

Migration System Selection. The management of the _____ functional activity has selected _____ as its migration system. The implementation process associated with the proposed migration system is scheduled to be completed by the end of FY _____.

Implementation Plan. Figure ES - 1 provides an overview of the proposed migration implementation plan:

Figure ES - 1, Action Plan GANTT Chart

<GRAPHIC: ES1.PCX>
(Graphic files were not included on original disk.)

The migration to _____ will be completed by _____ .
All functional data used by the system will be standardized by _____.
_____ will not be brought into full compliance with the DoD standard technical architecture by fiscal year (FY) _____. This will not occur until the

implementation of the target system is completed after FY_____ . By FY _____, the migration system will make expanded use of mega-centers, base level infrastructure, and other components of the Defense Information Infrastructure (DII). Full implementation of the DII will occur after FY _____ with the implementation of the target system.

Economic Analysis. Figure ES - 2 provides an overview of baseline costs, investment requirements, and operational savings associated with implementing the proposed migration solution.

<GRAPHIC: ES2.PCX>

Figure ES - 2, Life Cycle Cost Comparison of Baseline with Proposed Migration

This figure illustrates the anticipated savings from the implementation of the proposed migration system. The annual operating costs will be reduced from a total of $ _____ to $ _____ by FY _____. Implementing the proposed migration system, _____, will result in a total of $ _____in operations savings over the proposed seven years of the system's life. This translates into a savings-to-investment ratio of ____ to ___ over the first four years of the life cycle and _____ to _____over the full seven years of the system's life. has a payback period equal to _____.

Financial Impacts.   The financial impact of implementing the proposed solution is:

_____   The proposed Action Plan (i.e., implementation plan) may be implemented within current resources.

_____   Implementing the proposed Action Plan will require additional resources.

SECTION ONE: MIGRATION GOALS

This Integration Decision Paper (IDP) documents the results of a migration system selection process undertaken for the XYZ functional activity within the ABC functional area. This section of the IDP summarizes the status of related planning activities for both the functional area and functional activity, the status of the performance measures and targets used in the management of ongoing operations, and both near and long term goals for the XYZ functional activity.

1.1   Strategic Plans. The status of the strategic plans for both the ABC functional area and the XYZ functional activity is indicated below:

_____   Strategic plans have not been developed for this functional area/activity.

_____   Strategic plans for this functional area were published as _____. Functional
                     activity strategic plans have not been completed.

_____   Strategic plans for this functional activity were published as "Strategic Plans
                     for_____ " on _____.

1.2 Performance Measures and Targets. The status of the performance measures and targets for the functional activity are indicated below:

_____   Performance measures and targets have not been developed for this functional activity.
                     The target date for developing these performance measures is: _____

_____   Performance measures and targets were developed and published as "Performance
                     Measures and Targets for the Functional Activity " on _____.

1.3 Near-Term Goals (1-3 years). The following near-term goals have guided the selection of the migration system for this functional activity:

- Migration system is fully implemented within the functional activity within _____ years.
- Migration system is fully converted to functional area standard data elements within _____ years.
- Functional Process Improvement (FPI) plan (and accompanying Functional Economic Analysis (FEA)) for the functional activity is in place; _____ percent of the FPI plan implemented within _____.
- _____ percent of functional activity processes are fully integrated within the functional area.
- _____ percent of the functional activity's information resources are provided by the DII.
- _____ percent of functional activity processes are cross-functionally integrated across the Defense Enterprise

1

1.4 Long-Term Goals (4-7 years). The following long-term goals have guided the selection of the migration system for this functional activity:

- The functional activity uses only databases shared with other functional activities within the functional area.
- All functional activity information infrastructure is fully compliant with the Technical Architecture Framework for Information Management (TAFIM).
- percent of the functional activity's information resources are provided by the DII.
- percent of functional activity processes are cross-functionally integrated across the Defense Enterprise.
- percent of functional activity processes are functionally integrated with global organizations.

SECTION TWO: BASELINE ENVIRONMENT

2.1 Baseline Environment. Automated information management support for the_____functional activity is currently provided by _____.
Each of the _____ legacy applications support the basic data entry, activity processing, reporting and external system interface requirements of each service and agency within the functional activity.

Two of these baseline applications (_____ and _____) are base- (or local-) level systems. Three of these baseline applications (_____,_____, and_____) are corporate level systems. None of the other small systems incorporated enough functionality to warrant consideration as the migration system.

2.2 Baseline Workload Data. Schedule 1 summarizes the salient cost and workload data for each of the legacy applications within this functional activity.

Schedule 1 - Baseline Workload Data

<GRAPHIC: SCHD1.PCX>

2.3 Legacy Applications. Schedule 2 summarizes the basic characteristics of each legacy application.

Schedule 2 - Legacy Applications

<GRAPHIC: SCHD2.PCX

2.4 Baseline Technical Infrastructure. Schedule 3 characterizes the infrastructure used by each legacy application in this functional activity.

Schedule 3 - Baseline Technical Infrastructure

<GRAPHIC: SCHD3.PCX

SECTION THREE: TECHNICAL ASSESSMENT OF MIGRATION ALTERNATIVES

3.1 Technical Comparison of Legacy Applications. Schedule 4 includes migration assessment scores generated by the Defense Integration Support Tools (DIST) for each legacy application. Generally, these scores represent the relative ability of each legacy application to meet this functional activity's migration requirements.

Schedule 4 - Technical Comparison of Legacy Applications

<GRAPHIC: SCHD4.PCX

3.2 Alternatives Identification. Using the technical comparison scores listed above, managers from this functional activity chose _____ and _____ as potential migration systems.

3.3 Functional and Operational Description of Each Alternative.

_____is a batch driven, mainframe based system which meets a sufficient number of the functional activity's core requirements. _____ is a distributed system which addresses most of the functional activity's core requirements.

SECTION FOUR: ECONOMIC ANALYSIS OF MIGRATION ALTERNATIVES

This section compares the costs of the baseline system with the costs of the proposed migration alternatives.

4.1 Baseline IT Costs. Schedule 5 summarizes the annual information technology (IT) expenditures for each legacy application. They reflect only the IT component of each element of the current Functional Economic Analysis Model (FEAM) Cost Breakdown Structure (i.e., Civilian Labor, Military Labor, Equipment, Facilities, Materiel, General and Administrative (G&A), and Other).

Schedule 5 - Baseline IT Costs (Constant FY94 K$)

<GRAPHIC: SCHD5.PCX>

4.2 Cost Comparison of Alternatives. Schedule 6 compares the annual investment and operations costs of each migration system alternative with the annual operations costs of the baseline environment.

Schedule 6 - Comparison of Annual IT Costs

<GRAPHIC: SCHD6.PCX>

4.3 Annual Cost Reductions. Schedule 7 shows the cost reductions achieved for each alternative by fiscal year. This table presents both the payback period for the investment in each system as well as both a four year and seven year return on investment (ROI) calculation. This calculation shows the savings to investment ratio for each alternative for each period.

Schedule 7 - Annual Cost Reductions and Economic Analysis Factors

<GRAPHIC: SCHD6.PCX>

SECTION FIVE: PROPOSED MIGRATION SOLUTION

This section summarizes the selected migration system and describes the selected system's proposed configuration.

5.1 Migration System Selection. The functional management of the _____ functional activity has selected _____ as the migration system. The proposed migration is scheduled to be completed by the end of FY _____. Schedule 8 summarizes data concerning the selection and implementation of the migration system. _____ was selected as the migration system because it supports all the major functional requirements identified for the _____ functional activity, its relatively high score in the technical evaluation, and its savings-to-investment ratio.

Schedule 8 - Migration Decision Considerations

<GRAPHIC: SCHD8.PCX>

The economic rationale for the selection of _____ as the migration system is as follows. Baseline operations and maintenance (O&M) requirements for this functional activity (excluding investment requirements) are approximately $_____ annually (constant FY _____ dollars). This figure includes all software maintenance and communications charges for all systems currently supporting operations within the functional activity. The proposed migration would require a total investment of over the proposed four year implementation schedule, including of investment in the first year. However, substantial cost reductions would be generated by the proposed migration- a total of approximately $_____ during the period FY _____ through . This information is presented graphically in figure ES - 2. Failure to deploy the proposed migration system will result in higher levels of annual O&M expenditure and will result in ongoing opportunity losses from continuing baseline operations equal to approximately $____ per month.

5.2 Migration Workload Data. Schedule 9 includes workload information for the proposed solution, _____.

6

Schedule 9 - Migration Workload Data

<GRAPHIC: SCHD9.PCX>

5.3 Migration Applications. Schedule 1 0 includes applications information for the proposed solution, _____.

Schedule 10 - Migration Applications

<GRAPHIC: SHD10.PCX>

5.4 Migration Technical Infrastructure. Schedule 11 summarizes general infrastructure characteristics for the proposed solution,_____.

Schedule 11 - Migration Technical Infrastructure

<GRAPHIC: SHD11.PCX>

5.5 Migration OSE Compliance. As shown in schedule 12,_____would
meet selected Open Systems Environment (OSE) requirements approved in the Technical Reference Model (TRM)
of DoD's TAFIM (November 1993).

Schedule 12 - Migration OSE Compliance

<GRAPHIC: SHD12.PCX>

5.6 Projected Costs for Selected Migration Solution. Schedule 13 provides estimated annual costs for the proposed migration solution,

Schedule 13 - Projected Costs for Selected Migration Solution

<GRAPHIC: SHD13.PCX>

SECTION SIX: MIGRATION PLAN

This section summarizes the timing and schedule needed to initiate the migration path.

6.1 Migration Path and Timing. Schedule 14 includes the migration path and timing for the proposed migration solution,_____.

Schedule 14 - Migration Path and Timing

<GRAPHIC: SHD14.PCX>2

6.2 **Proposed Migration Implementation Schedule.** Schedule 15 shows the implementation schedule needed to initiate the migration solution.

Schedule 15 - Action Plan

<GRAPHIC: SHD15.PCX>

9

SECTION SEVEN: RISK ASSESSMENT

This section discusses project risk as it affects the deployment of the proposed migration system.

7.1 Risk Assessment. The Functional Area Program Manager (FAPM) for functional activity _____and the Joint Functional/Technical Team have reviewed the risks associated with the proposed migration selection. The status of the risk assessment is as follows:

-------- A formal risk assessment has not been developed for this functional activity. The target date for completing this risk assessment is _____.

_____The risk assessment associated with this proposed migration was completed and published on _____.

7.2 Major Risk Area Identification. Based on the completed risk analysis, the FAPM determined that the following risk areas must be addressed. The first major risk area is that technology may not be available to allow the_____ functional activity to extend full baseline functionality to the selected migration system, _____. The second major risk area is that sufficient resources may not be available to allow timely implementation of the proposed migration.

7.3 Recommendation to Reduce the Risk Level of Major Risk Areas. The_____ functional activity could reduce the risk levels associated with the proposed migration through the following actions. Immediately after the migration decision is approved,_____ functional management should attempt to consolidate representative functions into _____. If the consolidation fails, management would then know that it needs to consider other alternatives. Further, the _____ functional activity could reduce the risk that funds will be unavailable by identifying the cost-effectiveness of migrating functionality from other functional activities within the same functional area. If these other migration plans are not as cost-effective as the proposed migration plan (which is anticipated) then the ABC functional area's principal staff assistant (PSA) will know to reallocate budget resources from the other functional activities to this functional activity.

7.4 Contingency Plans. The management the _____ functional activity should consider the cost-effectiveness of other alternatives if, after the migration implementation process is initiated, the unavailability of required technology acts as a restriction on timely implementation of the migration system. Further, the PSA should consider the effectiveness of reallocating budget from other functional activity accounts to this migration effort if resources are inadequate.

SECTION EIGHT: IMPACTS, ISSUES, AND CONCERNS

8.1 Organizational Impacts. The_____functional activity's migration path toward Corporate Information Management (CIM) objectives will keep the organization viable, since these objectives must be met by all agencies within DoD.

8.2 Personnel Impacts. Although numerous managers and operating personnel may be dislocated by the increased productivity made possible by the implementation of the migration system, the management of the _____ functional activity does not anticipate any changes in overall personnel levels to result from the implementation of the proposed migration system.

8.3 Operational Issues and Resolutions. The following operational issues and resolutions have been identified.

8.3.1 Issue Identification. Migration implementation may impede the _____ functional activity's operations if the transition from the baseline to _____ does not proceed smoothly. For example, if planners have underestimated the time needed to migrate all baseline operations to _____, the functional activity may experience budget pressure to consolidate and discontinue baseline operations before the migration system is capable of addressing all the stated functional requirements.

8.3.2 Issue Resolution. The _____ functional activity could use a combination of interim testing and close-watching methods to resolve the transition issue identified above. For example, the Integration Manager (IM) for this functional area could recommend to _____ management that they perform an interim migration test to verify the smoothness of the transition. Specifically, the IM could suggest _____ management migrate a selected set of baseline functions before it migrates all the functions supported by the migration system. If the selected set of baseline functions transition smoothly, _____ management could sequentially migrate additional sets of functions until full baseline functionality is achieved. The IM should request the responsible PSA to seek assistance from the DoD Information Policy Council or the Corporate Functional Integration Board (CFIB) in the event interim testing has the potential to effect DoD migration plans.

8.4 Other Issues and Concerns. _____ functional management has not identified any additional issues to be addressed as part of this IDP.

11